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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,384	10/16/2001	Kim Houg Joong	381NP/50470	3058

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EXAMINER	
ELKASSABGI, HEBA	
ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,384

Applicant(s)

JOONG ET AL.

Examiner

Heba Elkassabgi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 68-86 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 73, 75-77, 79, 81, 83 and 86 is/are allowed.
- 6) ☒ Claim(s) 68 is/are rejected.
- 7) ☒ Claim(s) 69-72, 74, 78, 80, 82, 84 and 85 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claim limitations of claims 68 and 73 of "magnetic poles of said stator" must be shown or the features canceled from the claims. No new matter should be entered.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter of the first rotor and the second rotor in claim 68-86 in figure 17 must be shown or the features canceled from the claims. For purpose of examination 20L and 20R will be considered as the first rotor and second rotor. No new matter should be entered.

The drawings filed on 10/16/01 are acceptable subject to correction of the informalities; correction is required in reply to the Office action. Figures 1, 2, 3, 4, 13, 14, 18, 19, 20, 21(1), and 21(2) indicate plural embodiments of the figures, which are not labeled correctly. The correction will not be held in abeyance.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Dynamo-electric machine which uses a permanent magnet for a field system.

The disclosure is objected to because of the following informalities: On page 8, line 2; the first rotor is labeled as 20B. However, on page 7 the first rotor is labeled as 20A and the second rotor is labeled as 20B. Appropriate correction is required.

The disclosure is objected to because of the following informalities: On page 17, line 24; the second rotor is labeled as 29B. However, on page 7 the second rotor is labeled as 20B in the drawing. Appropriate correction is required.

Claim Objections

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 74 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim limitation "to third second field magnets" in line 2-3.

There is insufficient antecedent basis for this limitation in the claim. For purpose of

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examination the examiner, will interpret the claim limitation to state, "to said second and a third filed magnet", as is understood by the examiner in light of the specification.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 68 is rejected under 35 U.S.C. 102(b) as being anticipated by Masuzawa et al. (U.S. Patent 5821710).

A dynamo-electric machine having a stator (1) with a winding (12), a rotor (7,8) having a first (31) and second (32) field magnets having different magnetic poles and arranged sequentially and alternately on a rotating shaft (21) in a rotation direction. The first (31) and second (32) field magnets being opposed to the magnetic poles (11) of the stator. The first (31) and second (32) field magnets displace in a rotating direction of the rotating shaft (21) according to the magnetic action force of first (31) and second (32) field magnets and the direction of the torque generated in rotor (7,8).

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

I. Dependent claim 69, 70-72, 74, 78, 80, 82, 84-85.

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Dependent claim 69 is allowed over the which does not disclose a second field magnet is displaced with respect to said first field magnet with a first field magnet maintained when a rotor rotates in one direction at a high speed, and the centers of the magnetic poles of a first and second field magnets are shifted from the alignment state, and wherein a first field magnet is displaced with respect to a second field magnet with a second field magnet maintained when a rotor rotates in the other direction at a high speed, and the centers of the magnetic poles of a first and second field magnets are shifted from the alignment state.

Dependent claim 70 is allowable over the prior art which does not disclose a mechanism that moves a first and second field magnets in an axial or the rotation direction of the rotating shaft according to the magnetic action force of a first and second field magnets and the direction of the torque generated in a rotor, and in combination of a mechanism that controls the movement of a first and second field magnets.

Dependent claims 71,72, and 85 are allowed for being dependent upon claim 70.

Dependent claim 74 is allowed over the prior art does not discloses a wherein a second field magnet is displaced with respect to a third filed magnet with the centers of the magnetic poles of a first and third field magnets maintained in an alignment state when a rotor rotates in one direction at a high speed, and the centers of the magnetic

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poles of a second and third field magnets are shifted from the alignment state where the centers of the magnetic poles of a first to third field magnets are aligned, and wherein a first field magnet is displaced with respect to a third field magnet with the centers of the magnetic poles of a second and third filed magnets maintained in an alignment state when a rotor rotates in the other direction at a high speed, and the centers of the magnetic poles of a first and third field magnets are shifted from the alignment state where the centers of the magnetic poles of a first to third field magnets are aligned.

Dependent claim 78 is allowed over the prior art, which does not disclose an electric current to that advanced angle is amended according to the displacement of a first field magnet or the displacement of a second field magnet is supplied to a winding.

Dependent claim 80 is allowed over the prior art which does not disclose a support mechanism that guides the movement of said first and second field magnets is installed between said first and second field magnets and said shaft.

Dependent claim 82 is allowed over the prior art, which does not disclose a first, and second field magnets are installed on a shaft through the sleeve insulated magnetically and electrically a shaft.

Dependent claim 84 is allowed for being dependent on claim 82.

II. Independent claim 73.

Dependent claim 75-77,79,81,83,86.

Independent claim 73 is allowed over the prior art which does not disclose a dynamoelectric machine having a third magnet where a second field magnet and a first field magnet placed on opposite ends of the third magnet on a shaft and displaced in an axial or the rotation direction of the rotating shaft according to the magnetic action force of a first and second field magnets and the direction of the torque generated in said rotor.

Claims 75-77,79,81,83, and 86 are allowed being depended on independent claim 73.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.



HYE

THOMAS M. DOUGHERTY
PRIMARY EXAMINER
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